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May 29, 2003

Secretary
Federal Communications Commission
The Portals, TW-A325
445 Twelfth Street, SW
Washington, D.C. 20554

Re: Written Ex Parte Presentation
WT Docket No. 02-55

Dear Ms. Dortch:

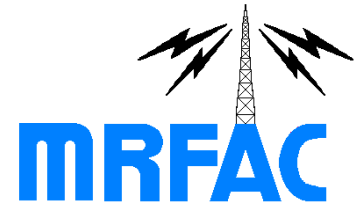
On behalf of the National Association of Manufacturers ("NAM") and MRFAC, Inc., we are herewith submitting the attached written *ex parte* presentation concerning the above-referenced proceeding. Should any questions arise concerning this matter, please contact Ken Keane of this office (202-775-7123) or undersigned counsel.

Sincerely,

[s]

Mark Van Bergh

Enclosure



May 29, 2003

Secretary
Federal Communications Commission
The Portals, TW-A325
445 Twelfth Street, SW
Washington, D.C. 20554

Re: Written Ex Parte Presentation
WT Docket No. 02-55

Dear Ms. Dortch:

On May 6, 2003, Motorola submitted a letter to Mr. Edmond Thomas, Chief, Office of Engineering and Technology, responding to his request for updated information on possible ways to resolve interference to public safety operations in the 800 MHz band. Motorola's letter included new information on technical advances in receiver technology which, combined with other technical improvements and rule changes, may provide a viable solution to the 800 MHz interference problems without the need to realign the 800 MHz band. NAM/MRFAC note that these technical solutions potentially offer a less disruptive approach to solving the interference. However, as discussed further below, there are some questions concerning the Motorola proposal which the Commission must first address.

Motorola discusses several advances in receiver technology looking towards the implementation of switchable attenuators and tunable filters, as well as expected incremental advances in intermodulation rejection performance. However, Motorola acknowledges that these advances alone are not sufficient. For example, the use of switchable attenuators would depend on the desired signal level in operation by the system receiving interference. Some systems may require increased signal strength in portions of their service areas to use switchable attenuators. Motorola also discusses the need for an updated set of best practices to accompany the technical improvements. Although Motorola discusses these issues in the context of public safety systems, its proposal necessarily applies equally to 800 MHz B/ILT systems, many of which have suffered similar interference as public safety systems and will have to implement similar improvements to avoid (or eliminate) future interference.

As Motorola notes, the signal strength levels required for the attenuators (-98 dBm or greater) does not represent the minimum usable signal strength for which some current systems are designed and at which they operate, which may be as low as -106 dBm in portions of their service areas. *See* Comments of Motorola, Inc., filed February 10, 2003, at pages 10-11. Thus, for attenuators to offer assistance an increase in signal strength would be required for some public safety and B/ILT systems. This may require adding base stations, repeaters or distributive antenna systems in some parts of a service area to increase the usable signal levels. In areas where additional base stations are not possible (due to the lack of available frequencies or tower sites), or in the border regions where bilateral agreements prevent encroachment beyond predetermined signal levels, conversion to a simulcast operation would be required. *See e.g.*, Motorola Letter at 5; Motorola Comments at 11.

The technical solutions Motorola discusses would constitute one of several tools that parties would have available to resolve interference problems under improved best practices. Thus, Motorola suggests that in situations where other mitigation techniques fail, evaluating the signal strength of the affected system and deploying new or upgraded receivers in conjunction with a plan to improve signal strength (if necessary), would improve the performance of the affected system. Motorola Letter at 12. Another important element of best practices that Motorola discusses is the need to address interference problems before they occur, and not simply rely on "reactive procedures to address interference after it occurs." *Ibid.* NAM/MRFAC fully support a proactive approach that looks to eliminate the potential for interference before it happens as a critical component of any revised best practices approach.

Thus, the Motorola proposal has many positive elements, even though some questions remain about the exact information provided in Motorola's letter. For example, there is some debate about the true extent of the interference problems that now exist. Motorola points to a low percentage of public safety licensees that have reported interference on the APCO database. Nextel notes its "proven methodology for recording and tracking reports of interference received from public safety agencies throughout the U.S." and suggests that based on its own records, the percentage of licensees reporting interference since January 2000 is approximately 10%, *i.e.*, several times higher than Motorola indicates.¹ While the Commission could work to resolve the exact number, NAM/MRFAC note that regardless of which party's numbers are used, a substantial majority of public safety licensees that would be subject to rebanding under the Nextel Coalition proposal, have not reported any interference incidents to Nextel. Unfortunately, there is no similar data with respect to the number of B/ILT licensees receiving or reporting interference.

As NAM/MRFAC have consistently noted, any viable solution of the 800 MHz interference problem must protect and minimize the transaction costs for innocent public safety and B/ILT licensees, who are not the cause of the interference problems. Therefore,

¹ *See* Motorola Letter at 13; Nextel Letter dated May 16, 2003, at 4-5. Neither party addresses the issue of interference to B/ILT licensees.

NAM/MRFAC believe the Commission should develop additional information concerning the technical solutions described by Motorola. For example, in Motorola's field tests referenced at pages 10 and 11 of its letter, did the systems subject to the field tests already have sufficient signal strength to take advantage of the new receiver technologies, or was it necessary to raise the signal strength to the desired level? Additional information also is needed on the methods and costs of implementing these new receiver improvements and signal enhancements. How many of the interference incidents now experienced by public safety and B/ILT licensees, or likely to arise in the future, would require system upgrades to resolve? Finally, the Commission needs to address how any costs would be funded, both to solve existing interference and to prevent future interference.

NAM/MRFAC believe that Motorola's letter represents a significant contribution to the discussion of how the Commission can best resolve the interference caused by the deployment of Nextel and other digital cellular low site/low power systems. Motorola's proposal warrants further evaluation to determine whether it offers a viable solution that would avoid the expense and significant disruption that necessarily would accompany realigning the 800 MHz band. The Commission should not rush to any judgment without exploring fully the viability of Motorola's proposal to provide a predicate for an effective, less disruptive and less costly resolution of the 800 MHz interference problem.

Sincerely,

National Association of Manufacturers

MRFAC, Inc.

[s]

[s]

Larry Fineran, Vice President
Regulatory and Competition Policy

Marvin McKinley, President